## **Chem 12 - Net Ionic Equation Worksheet**

Write balanced molecular, then a complete ionic equation, and finally a net ionic equations for each of the following reactions. Assume all reactions occur in aqueous solution.

HINT 1 - All compounds with ALKALI metals are soluble (remain aqueous)

HINT 2 - Assume all common compounds, water and oxygen etc are in their most common state (Liquid or gas) molecular / chemical 1. SLiOH(aq) +  $VCl_3(aq) \rightarrow 3LiCk_2$ ) +  $V(OH)_3(S)$ Complete 31 if + 30 Hag +  $V_{ag}^{3+}$  + 321 -> 31 if + 321 +  $V(OH)_3(S)$  $3 \text{ OH}^{-} ag + V^{3+} ag \rightarrow V(\text{OH})_{3} (S)$ 2.  $\operatorname{Na_2CO_3(aq)} + \operatorname{PHCl}(aq) \rightarrow \operatorname{PNaCl}(2q) + \operatorname{CO_2(q)} + \operatorname{H_2O}(\mathcal{L})$ 2Nex+ CO3 ag + 2H+ + 2et -> 2Nat + 2et + CO2(g) + H2O(L) CO3-2(ag) + 2Hag) -> CO2(G) + H2O(R) 3.  $Mg(NO_3)_2(aq) + Na_2CrO_4(aq) \rightarrow 2NaNO_3() + MgCrO_4(5)$   $Mg^{2+} + 2NB3 + 2Nat + CrO_4^2 \rightarrow 2Nat + 2NO_3^2 + MgCrO_4$ MS Reg + Croyley -> MgCroy us 4. 2-FeCl<sub>3</sub>(aq) +  $\Im$ Mg(s)  $\rightarrow \Im$ MgCl<sub>2</sub>(aq) + 2Fe(s) 2Fet+ber + 3Mg(s) -> 3Mg2++ber + 2Fe(s) 2 Feitay + 3 Mars -> 3 Martin + 2 Fecs,  $BaBr_{2}(aq) + Na_{2}SO_{4}(aq) \rightarrow 2NaBr_{ag} + Ba Soy (5)$   $Ba2+ + 2Br + 2Na+ + Soy^{2} \rightarrow 2Na^{+} + BaSoy (5)$ 5 Baray + 5047ag -> Ba Sdyls 6.  $\geq \operatorname{AgNO}_{3}(aq) + \operatorname{MgI}_{2}(aq) \rightarrow \geq \operatorname{AgI}(s) + \operatorname{MgI}(N \circ 3)_{2}(aq)$ 2Ag+ +2ND3 + Mg2+ + 2I ->2AGI(5) + Mg2+ +2ND3 2Agrag + 2Ilag -> 2Agt (S)